

FISCAL YEAR 1939

NARRATIVE REPORT

PEA ISLAND MIGRATORY WILDFOWL REFUGE

CAMP BF-2, MANTEO, N.C.

JULY 10, 1939.

I N D E X

1. Letter of Transmittal
2. Roster - Army Personnel for fiscal year 1939
3. Roster - Using Service Personnel for fiscal year 1939
4. Camp Life
5. Field Work for the past fiscal year (1939)
6. Slight outline of the work program for fiscal year 1940
7. Notes on equipment used at Camp BS-2, Manteo, N.C.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF BIOLOGICAL SURVEY
CAMP BS-2, MANTEO, N.C.

July 10, 1939

The Chief,
Bureau of Biological Survey,
Washington, D.C.

Dear Sir:

As you know the Pea Island Migratory Wildfowl Refuge is located in what is known as the "Atlantic Flyway". It is in Dare County, North Carolina on a narrow strip of land between the Atlantic Ocean and the Pamlico Sound.

The refuge was begun on June 1, 1936 and to date we have been striving to make the area a haven for all forms of Migratory Wildfowl. Those using this area for the past few years are such as Canadian geese, Snow geese, ducks of various species, and the lesser birds which migrate in the spring and summer months.

This report is an attempt to give some idea of the progress made within the past twelve months to make this refuge an attraction to wildfowl as they are on their annual pilgrimage north and south and on their return according to the plans approved by the Bureau of Biological Survey. It also attempts to outline a part of the activities planned for the next twelve months.

I hope that this report will prove to be both interesting and informative to some degree of the work of Camp BS-2.

Sincerely yours,

HAW/CR

Harry A. White,
Chief Foreman Constr. & Maint.,

ARMY PERSONNEL

During the entire fiscal year 1939 the Using Service has been fortunate in having the cooperation of the Army in matters relative to the camp work program. There have been a few differences of opinion, but in each and every case these were straightened out and the same relationship continued to exist as before the differences arose.

There have been several changes in the positions of commanding officer and junior officer due to expiration of the term of duty. This has worked somewhat of a hardship on the work and on the life in camp as well. Each officer changed the routine according to his personal experience in the past and these administrative changes in the life of the enrollee while in camp affect the moral of the men and work in the field. It takes a short period of time for the men to become adjusted to the new administration and during this short period a noticeable decline can be found in the field work.

July 1, 1938 we had a commanding officer Captain John R. Ratliff and Lt. Thomas Spaulding as junior officer. Captain Ratliff was relieved from duty and Captain Fred L. Ackerson was sent to take his place as commanding officer and Lt. E.L. Bonney replaced Lt. Spaulding.

Captain Ackerson has gone down in the history of the camp as being it's best commanding officer. He held the command of the camp in every detail, yet in the hearts of every enrollee there was a feeling of cooperation and desire to put the camp on the map as the best in the sub-district. It was under his command that the banner was given to this camp and remained for a period of several months. While he was commander of the company the work in the field was above normal due directly to the excellent moral of the men. Lt. Bonney was junior officer and held his duties in a very satisfactory manner.

Captain Ackerson was relieved from duty and Captain William B. McCall was sent to replace him. Lt. Bonney was also relieved and Lt. John N. Acuff, Jr., was sent to replace him. At this point the moral of the men fell to it's lowest point in several months. For some reason both these officers incurred the hatred of almost every enrollee in camp and while the officers were very cooperative with the Using Service the work in the field suffered to some extent. During the period of Captain McCall's service to this company we lost the "Best Camp in Sub-district" banner and the camp as a whole went from good to bad. Little or no improvements were made in the camp life of the enrolled men.

Captain McCall was relieved and Lt. Alan M. Eldrige was sent to take the place of commanding officer. Lt. Acuff, Jr., was also relieved and Lt. Ralph W. Kestler was sent to replace him. Lt. Eldrige won the friendship of almost every enrollee from the beginning and almost immediately the moral of the men began to rise to it's former peak and a movement was made to make this the best camp in the sub-district and return the banner to it's former resting place in our recreation hall. Lt. Kestler has also regained the friendship of the men as a whole and with the personnel which are assigned this camp at present we expect to continue into the new fiscal year at the old pace of the months past.

There have been no changes in the medical officer or educational advisor during the fiscal year. Dr. J. C. Weeks continues as contract surgeon and Mr. David R. McCain remains the educational advisor.

This completes a short resume of the army personnel for the fiscal year 1939.

U S I N G S E R V I C E P E R S O N N E L

The Using Service, Camp BF-2, Manteo, N.C. has had four additions during the fiscal year and one change in status from an hourly base to a monthly base.

In the month of August 1938 a need was felt for a mechanic to maintain the fleet of trucks and other heavy equipment and another employee to act as a drag-line operator. The camp had two enrollees who had been serving in this capacity and were fully capable of handling the duties that fall under the positions. In accordance with these conditions enrollee Oliver D. Bailey was discharged from the CCC and employed by the Bureau. Enrollee Joseph Columbus Blume had enrolled in the camp and was assigned to the drag-line crew as oiler. He was interested in the work and after a period of months training he was taught to operate a machine. When this opening came he was fully capable of holding the place and was employed as Machine Operator.

In October 1938 still another drag-line operator was needed to speed up the work of constructing the first dyke and Mr. Earl Raymond Keller was appointed to the place.

After the spring of 1939 opened up and more projects was opened a need was felt for another foreman to look after some of the new projects. In accordance with this need Mr. William Lloyd Warren was appointed to the position of Squad Foreman.

Mr. St. Clair Midgett who had been employed on an hourly base for drag-line oiler on the night shift of drag-line operators was raised from the hourly base to a monthly base of pay.

The personnel of the Using Service at present is as follows:

Chief Foreman Constr. & Maint.,
Harry A. White,

Junior Foreman Constr. & Maint.,
James M. Vannote,
Sam. C. Long,

Junior Engineering Aide,
Curtis Potter Lewis,

Under Clerk,
Charles S. Richardson,

Squad Foreman,
William Lloyd Warren,

Truck & Tractor Mechanic,
Oliver D. Bailey

Drag-Line Operators:
Horace G. Hayman,
Earl R. Keller,
Harry T. Hayman,

Machine Operator,
Joseph C. Blune,

Drag-Line Oiler,
St. Clair Midgett,

This completes roster of the members of the Using Service,
Camp BF-2, Manteo, North Carolina.

C A M P L I F E

Camp life at the end of the fiscal year was very much the same as in the beginning of the year. The same area with almost the same buildings and equipment for the comfort and welfare of the men.

There has been a few improvements which it might be well to take into consideration since the comfort of the men reflect directly upon the work in the field.

The mess as a whole has been very satisfactory. There have been short periods when the meals fell below par and some complaint was heard from the men and foremen, but taking the year as a whole we have had a minimum amount of complaint from this source. The meals have been fairly well prepared and there has always been an ample amount to satisfy the appetites of the men. It has been prepared under the direct supervision of the mess officer and steward.

The buildings in the beginning of the year were in quite a bit better condition than in the latter part. This is due to a period of approximately five months when little or no attention was given to them. They are now being repaired and should again be comfortable quarters for the men within a short period of time. There have been a few buildings constructed within the confines of the camp area which have made life much more comfortable than if they had not been constructed.

A new bath house and latrine has been constructed and fitted with the best equipment available. The first bath house was much too small for the number of men enrolled and as a result some discomfort was experienced at the mid-afternoon hours when all men reported from the field and wished to get cleaned up as soon as possible. The new bath house taken care of this crowded situation very satisfactorily.

When the new bath house and latrine was finished it left the camp with an extra house. The commanding Officer made very good use of the extra room by purchasing modern laundry equipment and installing enrollee labor so as to hold the cost to the enrollee for clothes washing to the minimum. The rate before the laundry was installed was taken on a flat basis of seventy five cents per month for each enrollee. The new laundry cut this cost to thirty five cents per month or a saving of forty cents per man each month.

The educational building was constructed during the fiscal year. In previous months and years the educational department was housed in the recreational hall which was too crowded for any effective work. There was no class rooms and a very small reading room which was used for games as well as reading, therefore, quiet was an unheard of thing in the reading room. With the new building constructed the

house gives ample room for reading, classes, and other activities which fall under the work of the educational department. There has also been a work-shop constructed which houses all power tools and other equipment for the electrical and carpentry and woodworking classes.

In spite of the good quarters for educational work, for some reason the program is not effective. The enrollees have been assigned classes and no pressure is put upon them to increase the attendance to classes. The enrollees go to class when they feel like it, and if other outside attractions call them they feel no hesitancy in cutting the classes assigned. There is no reason why this camp should not have one of the most effective educational programs in the sub-district and produce good results. The average of the enrollee's education would not be over the seventh or eighth grade in school and classes could be held that would benefit them greatly in future life. I believe that the new program which is supposed to go into effect on July 1, 1939 will prove to be much more effective than the one for the fiscal year 1939.

Some classes have produced good results and created an interest that could not be found in every camp. The poultry class has turned out two enrollees, who after discharge, went into the poultry business as a life's work and are making good. There are others attending the class who expect to go into the poultry work when they leave the service. From these results I believe that the poultry class has made a record that justifies the expenditure of funds needed to carry on the work. This does not consider the fact that the enrolled men, as well as foremen and army personnel, are supplied with fresh eggs daily instead of the cold storage eggs, or does it take into consideration the number of meals when fried chicken was the main dish.

The photography class for a while was making a record for itself. This class has decreased until only two were enrolled and they were not attending as they should. It is in the inactive groupe at present. We are very glad to state that from the past years record we can show that one man went into photography as a life's work. There was not an ample amount of equipment to carry on the work as it should have been, but there was an interest aroused so that with a little direct supervision on the part of a superior photographer the man would make a valuable man in any establishment. If there was a sufficient number interested in photographic work and funds were available to purchase materials and supplies for actual work it would be one of the best classes in the program, but such is not the case. It was at the beginning of the past fiscal year one of the largest and most active.

Housewiring and carpentry classes are very active.

Wood-working has been almost discontinued. At the beginning of the fiscal year it was one of the most active classes on the educational program.

Metal working created a fad in camp for a while and almost every man in the camp had some metal work under way, but

like many other classes it soon died for the lack of material and supplies.

Leather-craft was in the beginning of the fiscal year one of the active classes and many boys could be noted wearing new belts, and other leather goods. There is an ample supply of material for the continuance of this class, but for some reason there is a lack of interest.

I would say that as a whole we had an excellent educational program working fine until approximately five months ago. At this time other activities took the place of educational work and it has steadily gone from good to bad..

Recreational facilities at the beginning of the year were at the highest point in the history of the camp. There were many out-door games which could be used by the men in their leisure time in addition to many card and board games which were available for those who wished to remain indoors. As a result the men had a greater tendency to remain in camp during the evening and to retire at an early hour. Approximately five months ago it was noticed that there were more men leaving camp than in previous months and taking their hours of recreation outside the confines of the camp area. This was partially due to the fact that as the various games were worn out there was none substituted and a general lack of interest in camp activities resulted. The end of the fiscal year found these interest, with the exception of base-ball, at the lowest ebb in the history of the camp. There have been several men who have tried to keep a team going throughout the season, but it had been almost impossible.

This lack in interest of the camp life has been partially the cause of so many men deserting the camp after enrollment. The men had enrolled in the camp and as a rule they were boys who had spent only a little, if any, time away from home in their lives. As a result of not having the proper interest in camp life these men became home-sick to greater extents than if they had been provided with enough outside activities to keep them from constantly wishing to be at home with the family. This camp has had a larger number of desertions within the past six months than at any time in the history of the camp. An illustration of this can be best illustrated on April 13-14 when with a company strength of one hundred ninety seven men eleven of them were absent without leave, these figures are characteristic of the entire month of April while the month of May the number of AWOL's rose to still greater numbers. An instance of this is found on May 4, 1939 when with a total company strength of one hundred seventy seven there were fifteen men absent without leave. The month of June found a much better moral of the men and fewer left camp without a pass. It can be readily seen that situations such as described would naturally affect the work of the field.

With the end of the fiscal year showing a better record than in the past months it is to be anticipated that better work should be found in the work projects under construction.

FIELD WORK

The work in the field has consisted of twenty authorized work projects, nineteen of which were either put under construction or completed during the year. On the nineteen projects upon which work was performed a total of thirty two thousand three hundred eleven man days were consumed.

Job sheet 1584, Class. 411, Water Control Structures, was only 50% complete at the end of the fiscal year. One sluice box and water control gate was completed on the Pea Island Refuge in the Southern Dyke. This gate is so designed to enable a control of the depth of water in the pond created by the dyke. The work consumed a total of three hundred eleven man days to complete the structure.

There is to be another sluice box and water control gate placed in the dyke, but this was not started during the fiscal year 1939.

Job Sheet 1585, Class. 133. Levees, Dykes, & Jetties. This work has been pushed to the very limit in an effort to complete what is known as the Southern Dyke and to get the second dyke under construction. In connection with the work two Northwest Model 5, one and one fourth cubic yard drag-lines worked for two shifts per day, eight hours per shift. The day shift used enrollees for oilers while the night shift had a civilian employed for oiler of both machines. A total of 345,059 cubic yards were moved during the fiscal year with an expenditure of one thousand three hundred eighty eight man days.

Job Sheet 1586, Class. 314, Sheet Erosion Planting, was under construction for the entire year. It consisted of keeping the completed portions of the dykes planted in grass for the prevention of wind erosion of sand from the levee. This work represents the pulling of the grass from heavily sodded areas and transplanting the grass on the levee.

During the fiscal year the work required a total of two thousand six hundred twenty nine man days in planting twenty six acres of grass. This may seem to be a little high because the grass was planted at a spacing of 12" which requires a bit more time than if a wider spacing should be used. We have done some experimenting in this work and find that if a wider spacing should be used it is not as effective as required in preventing wind erosion of the sand, and if a closer spacing should be used a needless waste of grass and time would result.

Job Sheet 1587, Class. 131, Fences. This has been one of the main work projects for the fiscal year. It consist of cutting brush for sand fence pannels, trimming it so that the materials will lay flat in the pannel, construction of the pannel itself, and erecting the fence on the Pea Island Refuge. It also includes the cutting of all post and some poles used in the manufacture of the pannels. The pannels

US60 at this camp are 4' x 8' and so made as to create a wind-break when made into a completed fence.

These pannels are placed end to end along the beach and at oblique angles to the prevailing winds. As the winds pick up the sand as it sweeps over the barren areas and carried it along until the direction of the wind changes. At this point of deflection the wind the sand drops to the ground and a foredune is started. The sand continues to build up until the pannels are covered, then we place other pannels to continue this building until a foredune of the desired height is obtained.

The work required a total of eighteen thousand nine hundred eighty two man days in constructing pannels for, cutting post for, and erecting three thousand five hundred sixteen rods of fence. This project required more time than any other on our work program.

Job Sheet 1588, Class. 1023, Surveys. This work consist mainly of maintaining a constant check in the levee construction, job 1585 class. 133 with regards to crown levels and toe stakes. It has played a very important part in the work of the camp, but has required a minimum amount of labor to keep under way. During the fiscal year 1939 a total of two hundred twenty nine man days were used in the job.

Job Sheet 1589, Class. 715, Seeding or Sodding. This work was also under way during the first part of the fiscal year and through the fall months of the year. It consisted of placing cut sod around the water line of the dykes to prevent erosion of the sand from the levee by the constant wave action of the water. Some doubt has been expressed as to whether this type of sod would be of any benefit since a part of it would be covered with water for the greater part of the time. To date a careful check has been maintained and I am glad to be able to report that excellent results are noted to date. A total of seven hundred twenty four man days were used in sodding five acres of land.

Job Sheet 1590, Class. 1012. Preparation and Transportation of Materials. This job was first approved for the transportation of materials and supplies from camp to the Pea Island Migratory Wildfowl Refuge and later in the year it was increased to permit the manufacture of concrete post for use in the construction of fences at other refuges. The work of constructing the post have not been completed as yet and the cost per post is not available until all post are completed. This information will be supplies upon completion of the job.

To date in the entire project a total of 1050 man days have been used. The job is listed on CCC Form 7 as "Man Days". This includes the construction of the post and transportation of materials and supplies to the refuge from camp.

Job Sheet 1591, Class. 202, Truck Trails. This work was approved for the maintenance of the trails from NC State Highway # 34 to the Pea Island Refuge. In extreemly dry weather it is almost impossible for heavy equipment to travel over the trails from the pavement to the refuge and it is necessary to maintain these trails to enable the trucks

to travel to and from the refuge without such a great loss of time due to being stuck in the sand. During the past fiscal year we used a total of one thousand seven hundred sixty seven man days in maintaining one hundred two miles of trail.

Job Sheet 1592, Class. 1010, Marking Boundaries. This project was begun in the respect that temporary signs marking the land boundaries of the refuge were erected. Five miles were reported as being completed and ten man days were used.

Job Sheet 1593, Class, 713, Razing Undesirable Structures. This was the one work project on which no work was done during the fiscal year 1939.

Job Sheet 1594, Class, 503, Nurseries. This work consisted of taking care of the small seedlings which were transferred here from other locations and the small nursery which was begun from the seed collections of the fiscal year 1938. In this work we used a total of five hundred eighty four man days during the fiscal year 1939.

Job Sheet 1595, Class. 111, Vault (Office). This work was begun and completed during the fiscal year 1939. It consisted of making a fire-proof vault for the records and files of Camp BF-2. The work consumed a total of forty six man days.

Job Sheet 1596, Class. 1026, Equipment Repair & Construction. This work consisted of the repair and construction of all equipment charged to this camp. The fiscal year's activities under this classification used a total of one thousand four hundred seventy man days.

Job Sheet 1597, Class. 1028, Warehousing. This work consisted of taking care of all materials, supplies, and equipment with respects to the camp warehouse and Haing Service Area. The work required a total of one thousand four hundred thirty six man days.

Job Sheet 1759, Class. 157, Structural Improvements, Miscellaneous. This work consisted of laying a concrete floor in the camp garage and removing the wooden floor in use in the beginning of the fiscal year. It required a total of eighty six man days.

Job Sheet 1899, Class. 601, Fighting Forest Fires. This work was performed in protection of the materials of the Government which are left in the forest after construction until needed on the refuge in the completion of authorized work projects. The number of acres has not been kept with regards to the work performed. We have used a total of four hundred five man days on the project.

Job Sheet 2000, Class. 906, Other Wildlife Activities. This work covers several different classes of work as requested by the Under Refuge Manager. The types of work performed during the fiscal year 1939 were banding of wildfowl, making a wildfowl census, and pulling undesirable plants from the fresh water pond created by the Southern Dyke. A total of twenty eight man days were used on the project during the fiscal year.

Job Sheet 2001, Class. 714, Seed Collection. This work was done during the fall months and consisted of collecting grass seed for food cover planting. A total of one hundred pounds of grass seed were collected and two hundred sixty nine man days used.

Job Sheet 2073, Class. 104, Bridges. This work consisted of cutting the materials for four ramps over the dykes and construction of four temporary ramps over the dykes and sand fences. The construction of the permanent structures have not been begun with the exception of setting piling in the dyke at points where the ramps will be located. All piling for these structures are in place and are ready for the work to proceed.

In the cutting of the materials, creosoting them, constructing the temporary structures, and setting the piling we have used a total of six hundred sixty six man days.

Job Sheet 2247, Class. 110, Dwellings. This work was in cooperation with the NC CCC State & Private Camps, and not a part of the work program of the Pea Island Refuge. There was not a camp in the vicinity of East Lake North Carolina which could construct the dwelling for the fire warden and forest fire watchman of that locality and we agreed to aid in loaning NC CCC State & Private Camps build a small dwelling and garage at the fire tower near East Lake, N.C. The work required two hundred thirty six man days, however, thirty eight of these man days were furnished by the NC CCC State & Private Camps, leaving a total of one hundred ninety eight man days as furnished by this camp. We agreed to furnish up to two hundred man days.

This completes a list of the accomplishments for the work program of Camp BF-2, for the fiscal year 1939. I believe that when the time spent on each individual job is taken into consideration we have made good progress towards the eventual completion of the Pea Island Migratory Wildfowl Refuge.

TENTATIVE WORK PROGRAM FOR FISCAL YEAR 1940

The work program for the fiscal year 1940 has been submitted and approved for the various projects needed in connection with the eventual completion of the Pea Island Refuge.

There have been several jobs omitted from the program for the fiscal year 1939 because of the fact that were completed prior to July 1, 1939. There have been other projects not included in last year's program which will be put under way at some time in this year's program.

I shall undertake to give a small conception of the work anticipated at present for each of the jobs listed on our work program for 1940.

Job 1584 Class. 411, Water Control Structures, will consist of the construction of water control gates and sluice boxes in the levees constructed under job 1585. This work will not require as much time as other projects on the program, never-the-less it should be considered one of the major projects since it controls the fresh water ponds created.

Job Sheet 1585, Class. 133, Levees, Dykes, & Jetties, This work will be pushed throughout the fiscal year to the end that as much of the second dyke can be completed as possible. It is imperative that this work continue in order that food may be provided in fresh water ponds created by the dykes for migratory wildfowl.

Job Sheet 1586, Class. 314, Sheet Erosion Planting. This work depends largely upon the progress of the second dyke since the grass is planted on the levee to prevent erosion of the sand by the prevailing winds.

Job Sheet 1587, Class. 131, Fences. This work will use the major portion of labor as in the fiscal year 1939. As yet we have been unable to create a foredune as high as we would like to have for the protection of the refuge against extremely high tides from the sea. We will continue to build one fence on top the other as explained in previous reports and in other sections of this report until such a foredune is the result from our labor. All materials which will be needed in the present fiscal year have been purchased.

Job Sheet 1588, Class. 1023, Surveys. This work consist mainly of checking the toe stakes for the dyke and maintaining a constant crown level. It does not require such a great amount of labor, but is a very vital part of the work under job 1585. In some cases we use this project for running boundaries of lands upon which we have land agreements for the cutting of brush and fence post under job 1587.

Job Sheet 1589, Class. 715, Seeding or Sodding. This project will get under way very shortly. It will consist of seeding and sodding in the fresh water ponds various grasses which will serve as food for wildfowl. This job will also cover the sodding of barren areas left after the departure of snow geese last winter. It will be a rather slow work on account of the sod having to be cut and placed instead of planted. The exact number of acres to be sodded has not been definitely placed on record due to the fact that some of the area will be planted under job sheet 1586, classification 314, Sheet Erosion Planting. It is hoped to be able to begin this work as soon as possible so as to give the grass a start this summer before the arrival of wildfowl in the winter season.

Job Sheet 1590, Class. 1012, Preparation and Transportation of Materials. As stated under the heading of "Field Work" it is not definitely known just the number of post to be made for other refuges and until this is determined the extent of the work cannot be given a fair estimate.

In addition to the construction of concrete post this project includes the transportation of materials to the refuge. The work will be included in the active list of projects in this respect as needed throughout the entire fiscal year.

Job Sheet 1591, Class. 202, Truck Trails. This work will be required from time to time in maintaining the roads between NC State Highway # 34 and the Pea Island Refuge. This work will vary according to the climatical conditions since in dry weather the sand becomes soft so much faster and cuts into deep ruts quicker than in wet or damp seasons. It is anticipated that about the same amount of work will be required during the fiscal year 1940 as in the year 1939.

Job Sheet 1592, Class. 1010, Marking Boundaries. This work will be begun as soon as it is possible for us to secure a pump for jetting piling which will be used a post for the signs which mark the boundaries of the refuge. We had planned to have this work completed before the beginning of the present fiscal year, but due to a lack of equipment the work has not been begun to date. It will take but a short time with only a few men to complete the job. All materials for the project are on hand at present with the exception of a few bolts and lead washers.

Job Sheet 1593, Class. 713, Razing Undesirable Structures. This work is very indefinite due to the fact that the materials in the structures to be razed will be used in the construction of headquarters buildings and other structures on the refuge. At the present time the location of the buildings to be constructed has not been settled, and until this question is settled it is better that we do not undertake the razing of the buildings now standing on the refuge because there is no place provided where the materials would be protected until needed. It will take quite a bit of labor to raze the buildings and due to the fact that we expect to salvage as much lumber as possible extraordinary precautions must be taken in the work so that the materials will be left in as good condition as possible.

Job Sheet 1594, Class. 503, Nureseries. This work will take care of the camp nursery for the fiscal year 1940. There will not be as much time spent during this fiscal year as was spent last because of the fact that there is not anticipated such a large planting program as we had for the past year. A great part of the seedlings which were on hand last year have either been transferred to another camp or placed on the refuge. This will cause less time to be spent on the nursery than in the fiscal year 1939.

Job Sheet 1596, Class. 1026, Equipment Repair and Construction. The work under this job will be approximately the same as in years past. It consist of repair and construction of all types of equipment within the confines of the camp area.

Job Sheet 1597, Class. 1028, Warehousing. This work will require approximately the same amount of labor as in the past fiscal year. It takes care of the materials stored in the camp warehouse and within the confines of the Using Service area. We have at the present time quite a larger stock of materials than ever before in the history of the camp but we are not expecting to make any further extensive purchases for materials and therefore there should be no cause of additional labor in taking care of the warehouse and area as a whole.

Job Sheet 1999, Class. 601, Forest Fire Fighting. This work is quite uncertain because it is impossible to determine the number or size of the forest fires which we are going to be called on to fight during the year. For the past several years we have had quite a variation in the amount of work under this project. It is hoped that we will have only a little work during the fiscal year 1940 fighting forest fires. There is a training course in progress for all enrollees and it is compulsory for all rated men to take the course and successfully pass the same to hold their leader or assistant leader's rating. All foremen have had the course and are competent to take charge of the work.

Job Sheet 2000, Class. 714, Seed Collection. This work was begun in the fiscal year 1939 and will be continued in the seasons practical for such work. There will be about the same amount of work in the fiscal year 1940 that we had in 1939.

Job Sheet 2000, Class. 906, Other Wildlife Activities. This work includes any work in furthering the program of wildlife conservation and statistics not specifically chargeable to other authorized work projects. In the fiscal year 1939 there was but little work done at this camp under this classification, however, we expect to have more to do in the present year.

Job Sheet 2073, Class. 104, Bridges, Vehicle. This work consist of the clearing of timber for four ramps over the dykes on Pea Island Refuge. The work in the fiscal year 1939 consisted of cutting the material and preparing it for the actual construction of the ramps. The work in the present fiscal year will consist mostly of the actual construction of the ramps or bridges. There will not be as many man days spent in 1940 as there were in 1939.

Job Sheet 2283, Class. 504, Seed Collection. This work was not on the authorized work projects for the year 1939 and is a new project. It will consist of collecting seeds in the proper seasons for use in the camp nursery. Only a small amount of labor will be expended on the project.

Job Sheet 2284, Class. 505, Seed Collection. Like the project mentioned above, this is a new project and will be used for supplying the camp nursery with seed. Only a small amount of labor will be necessary to carry it to completion in the season for seed collection.

Job Sheet 2285, Class. 501, Tree Planting. This project will take care of the planting of shrubbery and trees on the Pea Island Migratory Wildfowl Refuge. There will be no need for a great outlay of time in the work since there are only periods when it may be carried on successfully and there is not such a large area to be used in connection with the work.

Job Sheet 2286, Class. 703, General Clean-up. This project was authorized to clean-up the entire refuge of debris and refuse which has no part on the refuge plans. There are many acres to be covered and it will be impossible for us to complete the project during the fiscal year, however, we expect to get as much of the work done as possible. The time spent on this project will depend largely upon the pressure from other projects of a higher priority.

Job Sheet 2287, Class. 153, Signs, Markers, and Monuments. This work consist of making appropriate signs and markers for the refuge. It is not anticipated that such a large outlay of time will be needed in the construction of the signs and markers. We hope to have this work completed at the earliest possible time since at present there are no signs or markers directing tourist or others to the refuge.

This completes the work as outlined for the period July 1, 1939 to June 30, 1940. It gives in a very slight manner the accomplishments expected from the work program as submitted and approved for the fiscal year 1940 and if we are able to complete the work as outlined here I believe that it will be a period well spent in the eventual completion of the refuge as an inducement to wildfowl to stop in their annual pilgrimage from the north to the south and return.

EQUIPMENT

The equipment of Camp BF-2, Manteo, N.C. consist of five one-half ton pick-ups, twelve one and one half ton stake trucks, one dump truck one and one half ton capacity, and two one and one fourth cubic yard drag-lines.

In the work of the authorized work projects at this camp we have a few conditions which are not found in camps away from the coast. These conditions cause a much greater depreciation than would be normally expected under ordinary operating conditions.

The sand in dry weather becomes soft and cuts into deep ruts very readily. The result is that unless a constant effort is made on truck trail maintenance there is much trouble experienced by the truck drivers in getting stuck in the sand ruts. The sand out of the ruts is not packed as much as that in the road and this tends making it impossible to drive outside the established trails. This continual sticking causes much greater depreciation of equipment than ordinary.

Rust plays a great factor in the work off all equipment at this camp. The salt in the atmosphere and in the water through which our equipment is forced to travel causes an unusual amount of corrosion on all metals. It is the policy of this camp to wash every piece of equipment with fresh water and to go over it with an oily rag after the day's work has been completed. This washing and oiling counteracts the salt and tends to neutralize it. For the past three months, however, the water supply of the camp has been very limited and not enough was supplied for the washing of equipment. The result of this inadequate supply of water is a noticable increase in the amount of rust on all trucks and heavy equipment.

The beginning of the fiscal year found our equipment in a fair running condition with the exception of one Chevrolet Pick-up which was in the process of being surveyed from service. It has been kept in a fair condition and in the latter part of the fiscal year six of the Chevrolet motors were carried to the Central Repair Shop for a complete overhaul. These motors have placed the repair cost for the fleet as a whole a little high, but in the next fiscal year it should not run so high.

The drag-lines have run throughout the year with a minimum amount of repair work. Cable and bucket parts have been about the only cost for maintenance.

If no unforeseen break-downs occur with the machines I see no reason why we should run through the fiscal year 1940 without any great expense or at least be able to stay within the amount requested for the coming periods.